

FIG. 1
PRIOR ART

410050406 - 834002

FIG. 2
PRIOR ART

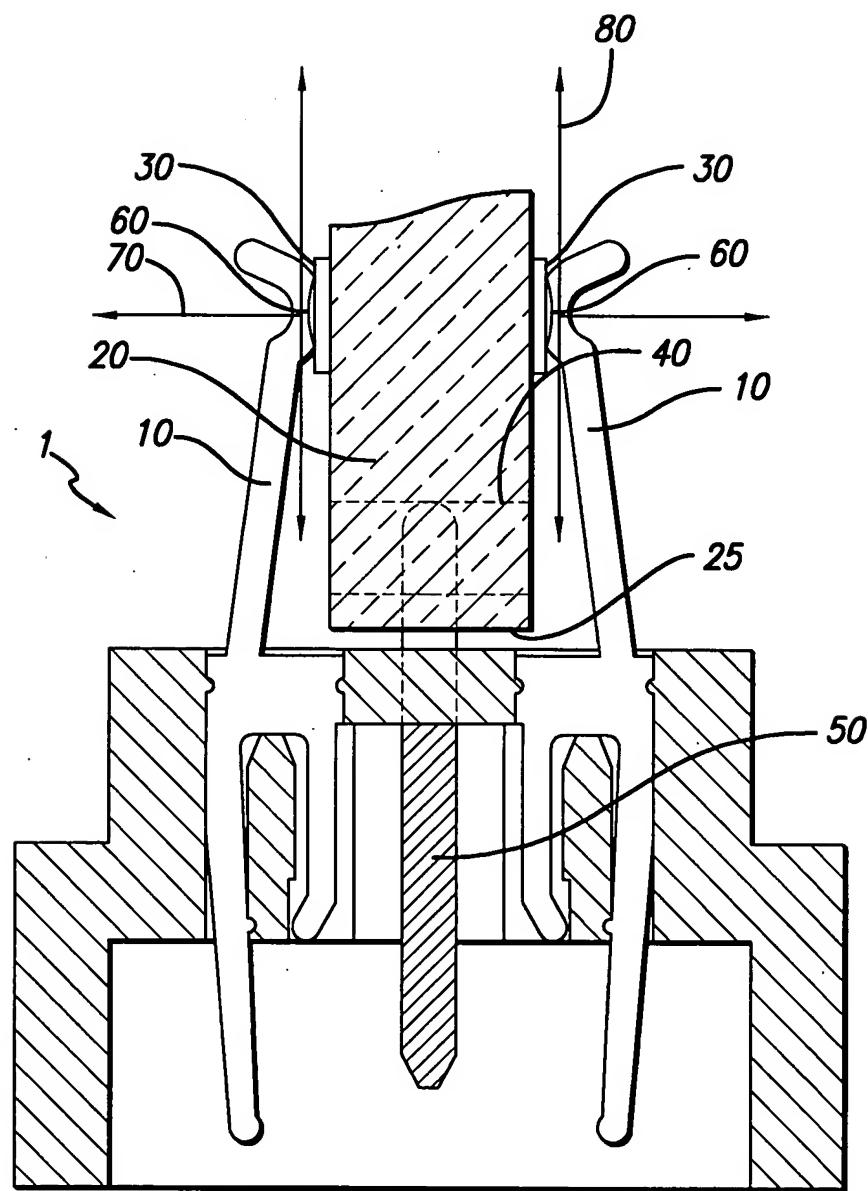


FIG. 3

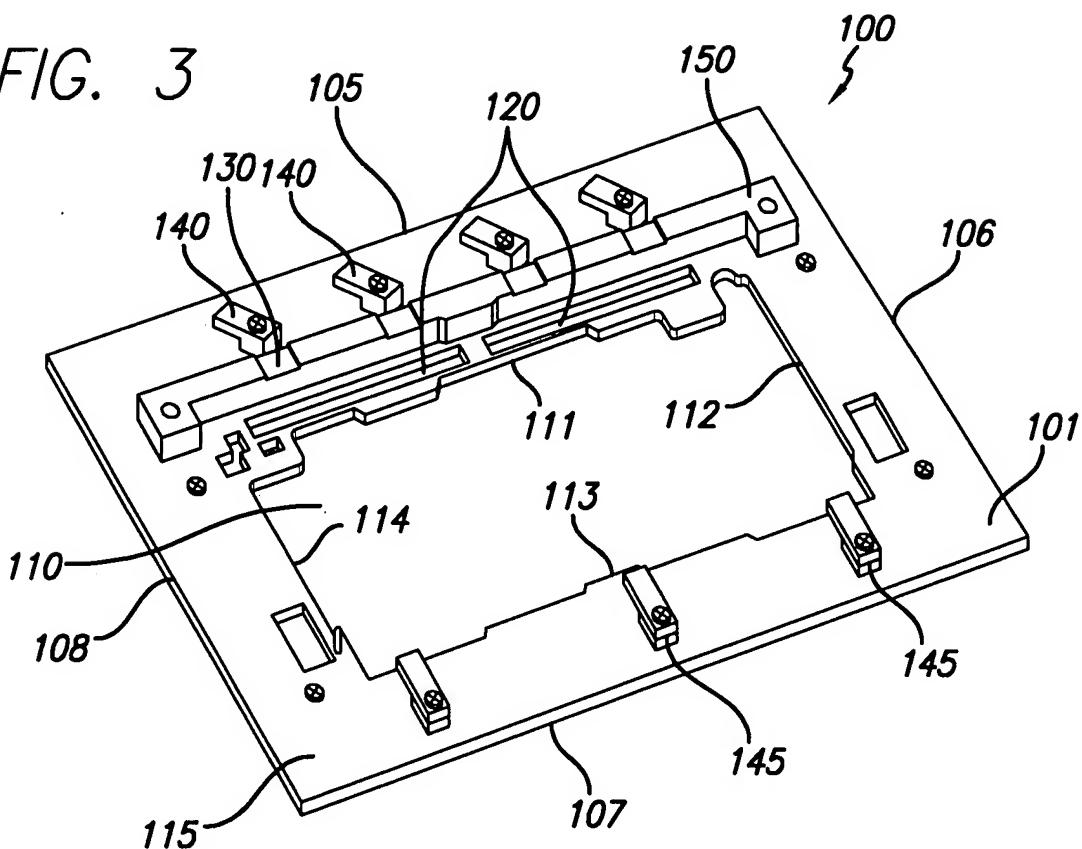
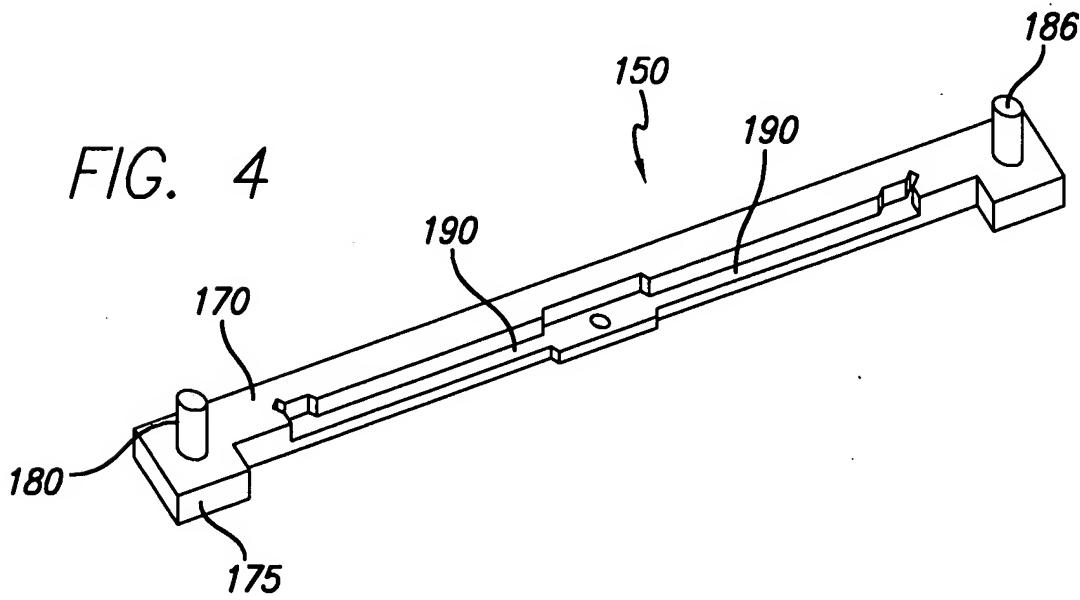


FIG. 4



140

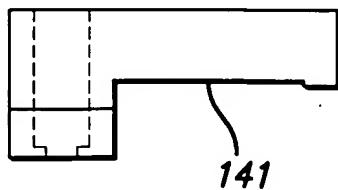


FIG. 5

FIG. 6

4/5

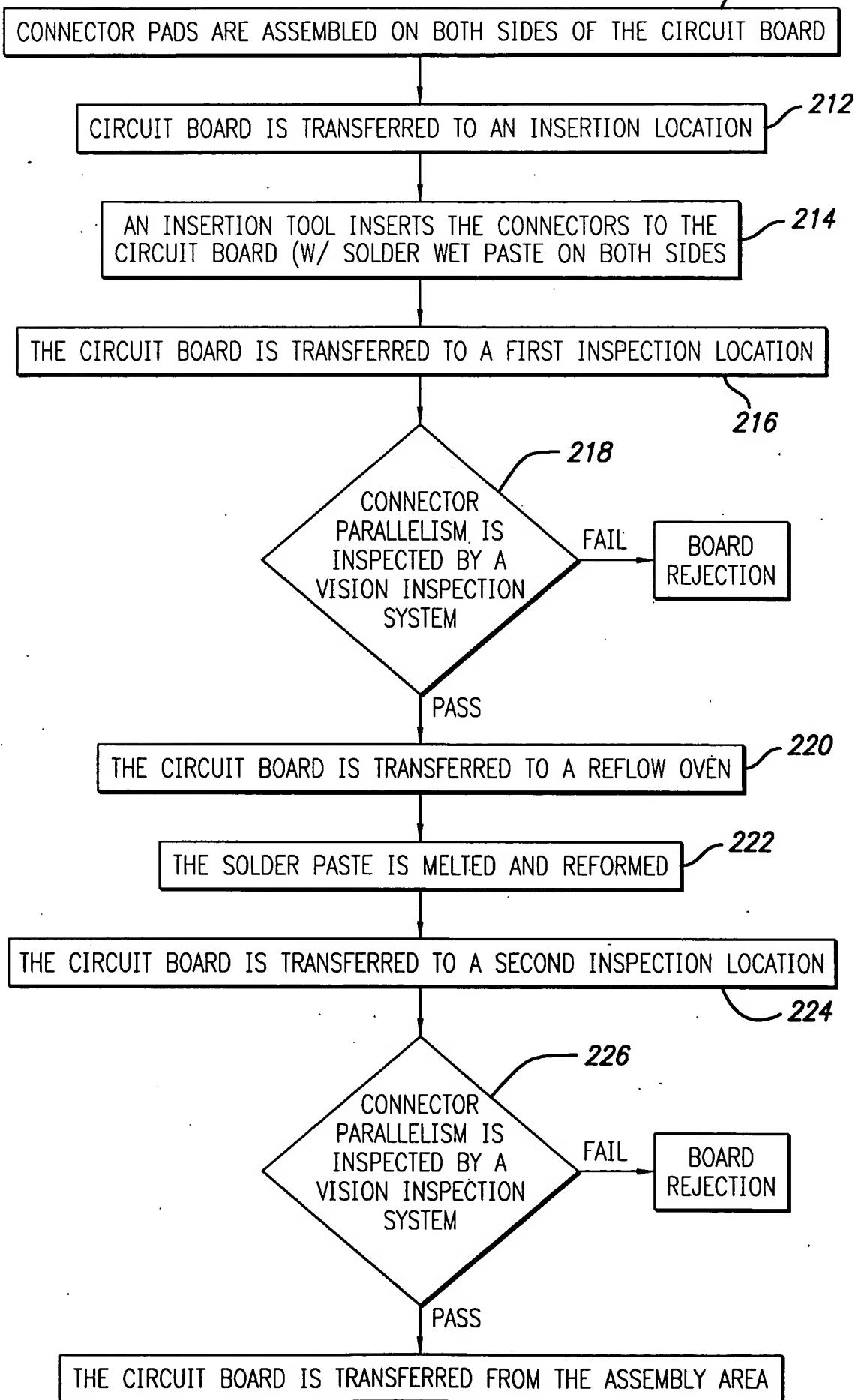


FIG. 7

5/5

310

CONNECTOR PADS ARE ASSEMBLED ON BOTH SIDES OF THE CIRCUIT BOARD

312

CIRCUIT BOARD IS TRANSFERRED TO AN INSERTION LOCATION

314

AN INSERTION TOOL INSERTS THE CONNECTORS TO THE CIRCUIT BOARD (WITH SOLDER WET PASTE ON BOTH SIDES)

316

THE CIRCUIT BOARD IS PLACED IN AN ALIGNMENT FIXTURE

NOT FIT

BOARD REJECTION

FIT

THE CIRCUIT BOARD (WITH THE FIXTURE) IS TRANSFERRED TO A REFLOW OVEN

318

THE SOLDER PASTE IS MELTED AND REFORMED

320

A REPRESENTATIVE SAMPLE OF THE CIRCUIT BOARD IS TRANSFERRED TO AN INSPECTION LOCATION

322

CONNECTOR PARALLELISM IS INSPECTED BY A VISION INSPECTION SYSTEM

FAIL

THE ENTIRE BATCH OF CIRCUIT BOARD MAY BE INSPECTED

PASS

THE REPRESENTATIVE SAMPLE OF CIRCUIT BOARD IS TRANSFERRED FROM THE ASSEMBLY ARE